rethink robotics

Meet your new lab partner.

Introducing Baxter™ Research Robot – a compelling new addition to the world of corporate and academic research. Just as our flagship robot Baxter is revolutionizing the manufacturing world with a safe, affordable and easy to use automation solution, Baxter Research Robot is revolutionizing how labs of all sizes are able to leverage cutting edge technology to develop their own applications and innovations.

baxter™
research robot

A safe, affordable, robust innovation platform.

Baxter Research Robot leverages the same impressive safety features, ease of use and affordability as the original Baxter robot for manufacturing, while offering several added characteristics that make it an ideal fit for labs. Baxter Research Robot allows research teams to focus on specific application development goals, including human-robot interaction, collaborative robotics, planning, manipulation, control, and perception. Whether your focus is product testing or developing the next big innovation in robotics, Baxter Research Robot is the ideal platform for your success.

Baxter Research Robot provides a safe, affordable and robust platform for innovation. It is specifically designed with the needs of academic labs and corporate research departments in mind:

- **Utilizes an open source Software Development Kit (SDK)**, allowing researchers to build a wide array of custom applications

- **Built on a standard ROS framework**, giving researchers the ability to share innovations and build on each others' success

- **Leverages collaboration tools** such the Unified Robot Description Format (URDF) to promote sharing across teams and organizations

360° sonar and front camera for custom sensing applications

Torque, position and velocity sensing on each joint

7 degrees-of-freedom per arm for maximum flexibility and range

Uses the Unified Robot Description Format (URDF) for collaborating across research groups

ROS framework for seamless integration across platforms

Software Development Kit for installation on your development workstation

Fully integrated cameras on head and each wrist for visualizing end-effector interactions

End-effector specification for designing custom intelligent hands

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Baxter Research Robot – Basic Specifications

Physical
- Robot height: 3'1" without optional pedestal
- Robot height with pedestal: 5'10" - 6'3" (adjustable)
- Arm length to end-effector plate: 41"
- Torso mounting plate diameter: 13.3" (for mounting on table)
- Body weight, without pedestal: 165 lbs

- Body weight, with pedestal: 306 lbs
- Degrees of freedom: 14 (7 per arm)
- Pedestal footprint: 36"x32"

Electrical
- Supply voltage: 120 Volts Alternating Current
- Rated current: 6 Amps

Environmental
- Protection classification: IP50
- Operating temperature range: 32-104° F (0-40°C)

End Effectors
- Vacuum cup with interchangeable cups
- Electric parallel gripper with interchangeable 'fingers' and user-adjustable 'fingertips'

Workstation Requirements (workstation not provided)
- Ubuntu 10.04 LTS and ROS Electric, with minimum specifications:
  – Intel i5 or above
  – 4GB memory or above
  – Min. 2GB of free disk space
  – Ethernet port

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MADE IN U.S.A.

Rethink robots are proudly designed and manufactured in the United States of America.

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